
AUTOMATED PEOPLE MOVER
THE LIGHT METRO TECHNOLOGY
POMA

AUTOMATED PEOPLE MOVER (APM)

APM is a family of fully automated cable propelled transit system **designed to quickly and efficiently transport passengers over short distances**. These driverless vehicles operate on dedicated tracks **connecting key points** such as airport terminals, commercial complexes, business districts, or densely populated urban centers.

APM are characterized by their high frequency and ability to **operate independently of road traffic conditions**, with an exceptional level of **reliability and punctuality**.

Their automation reduces operational costs and enhances passenger safety. APM also contribute to reducing the carbon footprint by promoting **sustainable mobility** and decreasing reliance on individual vehicles.

Automated People Movers are an innovative response to the challenges of demand for fast and efficient public tran

Innovative automatic cable propelled solutions **since 1982**

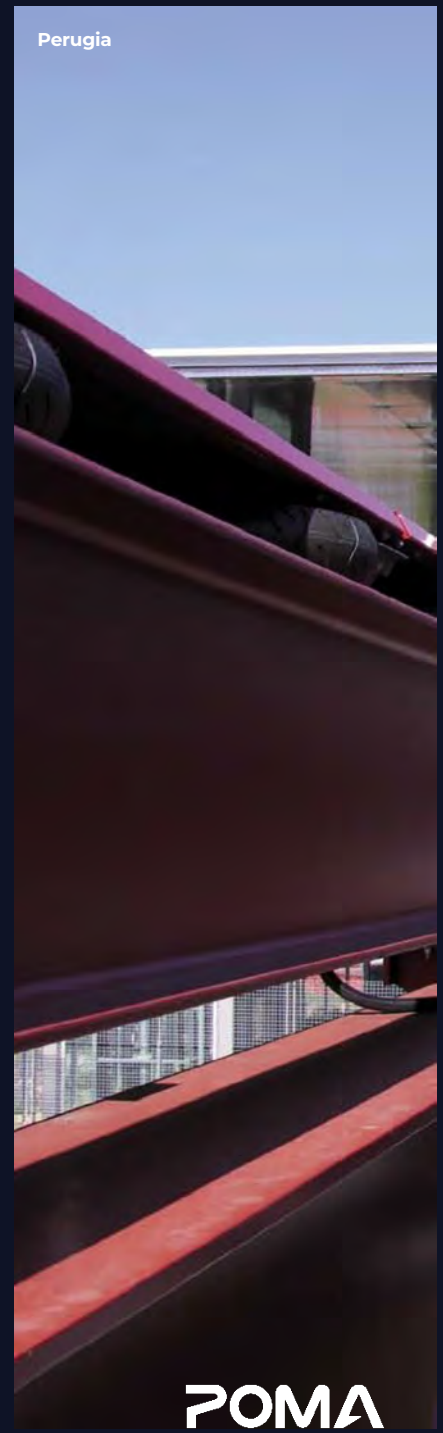


TABLE OF CONTENTS

POMA

Cairo (airport)

Frankfurt (airport)

HIGH-PERFORMANCE SOLUTIONS

10 REASONS WHY

Spectacular routing: Rope-propelled APM climb steeper inclines and turn tighter turns than any competing system. This greatly reduces the total transport system footprint.

Visible attractiveness and comfort: Passengers do not need to study schedules because the carriers arrive at regular and if necessary, very short intervals.

Superior reliability: APM run on their own tracks and always arrive on time even when street traffic has come to a complete congested standstill.

Maximum energy efficiency: One drive system with redundant design of all vital components propels all carriers on the track. During deceleration the motor converts to a generator, thereby feeding energy back onto the grid.

High capacity: With up to 10,000 passengers per hour in each direction at speeds of up to 15 m/s (ca. 50 km/h), rope-propelled APMs compete head-to-head with any urban transport system.

Lower labor costs: Vehicles for up to 400 passengers operate without on-board staff, from a remote Control Centre, greatly reducing operating costs. Preventive Maintenance happens during night shift.

Efficient energy usage: APM always draw the optimal amount of energy for the actual passenger load, saving huge amounts of power.

Cost saving from the start: Rope-propelled APM require lower initial investments and operation costs than all other urban transport systems. Thus they are ideal for successful public-private partnerships. POMA demonstrated that a complete turnkey system could be put into full, successful and unrestricted operation from day 1.

Sustainability and carbon footprint: Simulations show that rope-propelled APM systems generate up to 5 times less CO_2 emissions than a shuttle bus system on the same ride.

Minimal infrastructure: Low requirements of infrastructures volumes with less steel and less concrete than for a self-propelled vehicle.

POMA

IN A NUTSHELL

- *Up to* ***10,000*** *persons/hour/direction*
- ***15 m/s*** *max speed*
- ***8 km*** *max length*
- ***99,9%*** *availability*


Miami
POMA

Innsbruck

ANTICIPATING CUSTOMERS' NEEDS TO TAKE THEM TO THE NEXT LEVEL

POMA relies on its **ability to adapt**, its understanding of human and environmental challenges, and **its agile organisation** to build emblematic achievements. These are unique, perfectly **integrated projects**, designed for the enjoyment of users and to raise the profile of the sites. Anticipating and supporting customers' needs to take them to the next level.

Today, POMA has made a name for itself **on five continents** through projects that are emblematic of its expertise. Renowned throughout the world, this French company has succeeded in preserving its family governance. The international **HTI Group**, headed by Anton Seeber, passionately pursues POMA's development.

POMA

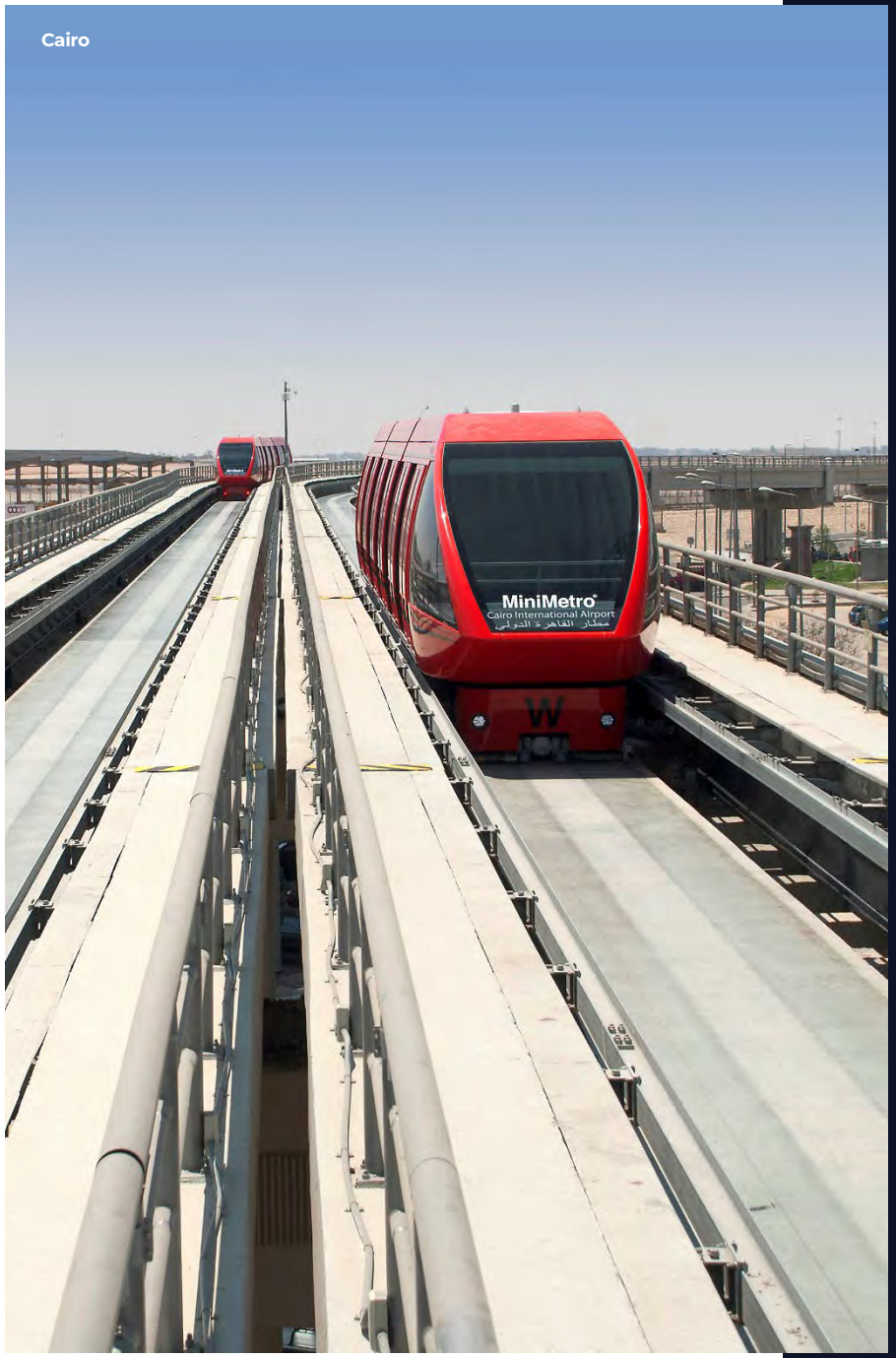
SUSTAINABILITY AND CARBON FOOTPRINT

*An APM system generates up to **5** times less Carbon emissions than a shuttle bus system on the same ride.*

LIGHTER SOLUTIONS

Passive vehicles *are pulled by a rope, which drive is located in the remote machinery room : the technical structure (viaduct) does not have to carry the weight of the motors. Such a* **lighter structure** *has a considerable impact on the general carbon footprint during construction, and the* **single drive unit** *means higher general yield on the power consumption.*

POMA



Cairo

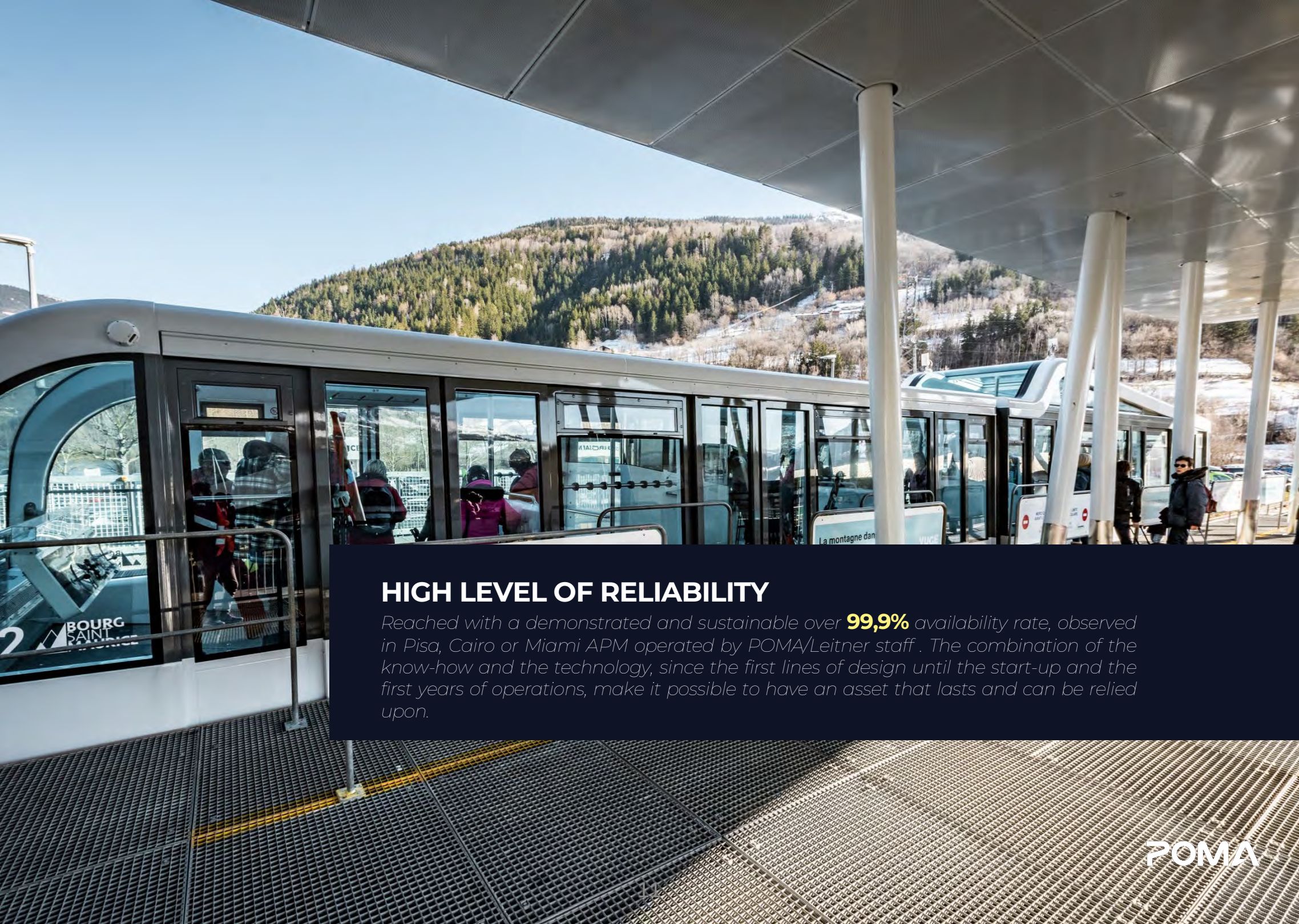
CONTROL OF COSTS ALL ALONG THE PROJECT'S LIFECYCLE

Total cost of ownership

Our APM solutions are closely evaluated in terms of Total Cost of Ownerhsip, typically over up to **25** *years. The return of experience of POMA/Leitner feeds back the conception of the APM to continuously reduce the total Opex costs:*

- *educe spare parts consumption*
- *reduce general power consumption*
- *increase automation*
- *increase predictive maintenance*
- *continuously improve Opex costs of Maintenance and Operating staff*
- *limit unexpected breakdowns*

With such good knowledge on costs, POMA can support client in the construction of a reliable Business Plan prior to their investment decision, and to make sure Operation costs remain as planned.



HIGH LEVEL OF RELIABILITY

Reached with a demonstrated and sustainable over **99,9%** *availability rate, observed in Pisa, Cairo or Miami APM operated by POMA/Leitner staff . The combination of the know-how and the technology, since the first lines of design until the start-up and the first years of operations, make it possible to have an asset that lasts and can be relied upon.*

ATTRACTIVE PUBLIC TRANSPORT

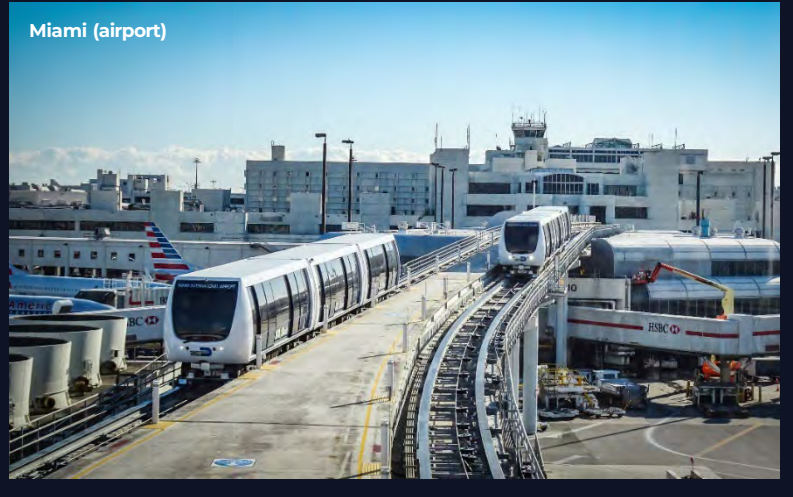
Detroit (airport)

APM : RECOMMENDED BY LEADING CITIES

Covering few hundred meters to few kilometers, APM connect urban centers, event locations, shopping malls, recreational areas, airport-terminals and tourist attractions.

Perugia *loves its « Linea Rossa » because once every minute it is ready boarding.* **Innsbruck's** *APM was included in the « Design 100 » in Time Magazine's worldwide ranking.* **Frankfurt's** *APM turns heads with its futuristic bridge design.* **Zürich**´s *Skymetro connects the Airside Center with Dock E, running in two parallel tunnels crossing under an airport runway.* **Cairo**´s *APM is the backbone of efficient passenger transport at the new airport.* **Barcelona**'s *iconic amusement park, accessible with the brand-new funicular, overlooks the city of Gaudi and its unique vibe.* **Miami International airport** *switched from a self propelled technology to a POMA cable propelled APM for life to increase availability and reduce total cost of ownership*

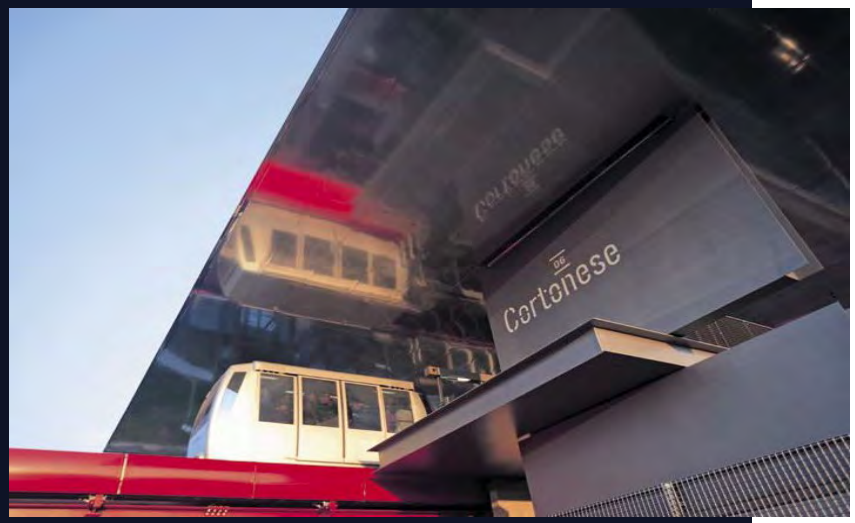

Frankfurt (airport)


Miami (airport)

Zurich (airport)

SUSTAINABLE AND INTEGRABLE

WHAT CUSTOMERS SAY



For Perugia's Mayor **Renato Locchi** *who considers walking to be the most important form of mobility in the town center, the APM which opened in 2008, represents the new backbone of his mobility policy which is highly oriented toward sustainability.*

For Innsbruck's Mayor **Hilde Zach** *it was clear from the very beginning that the new Hungerburgbahn in Innsbruck had to be conceived not only for tourism, but also as a means of interurban local transport. For that reason, when compared to the old funicular, the valley terminal was moved to the city center. The new cableway has been fully integrated into the Innsbruck public transit system.*

POMA

CONCEPT

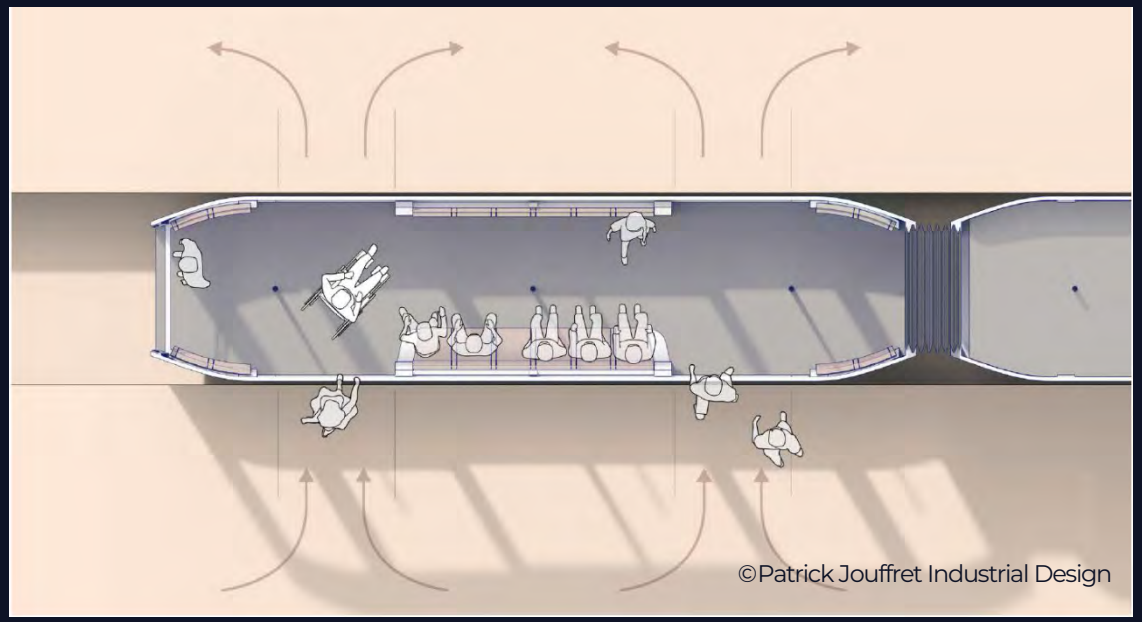
Adapting our transportation systems to its surroundings is the challenge that we wish to face for each project. Mirroring the environment, taking into account the constraints, thinking out of the box, transforming a creation works into a technical asset. This is where we bring all our dedication, commitment and ultimately, value. From design phase, the creators are involved to discuss with our engineers and limit the field of possible.

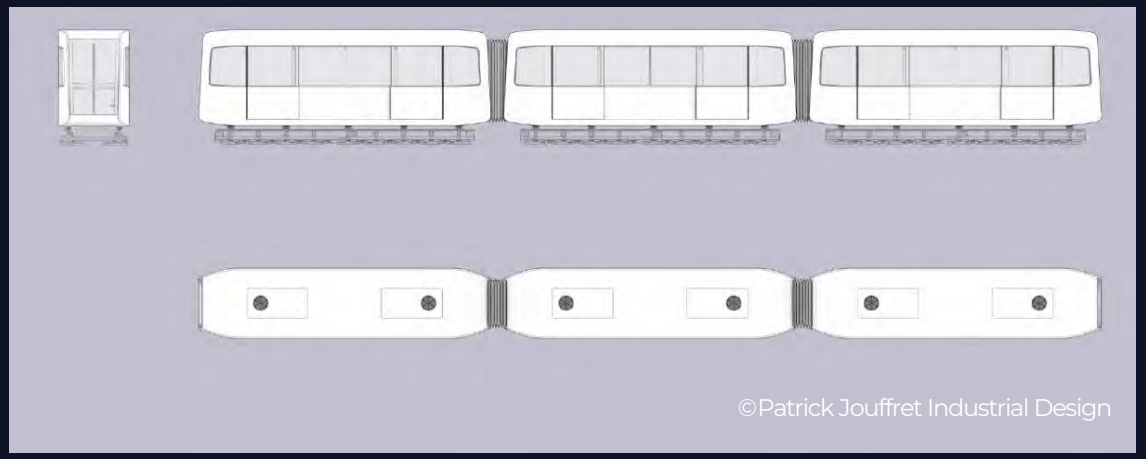
Besides the “from the ground” experience, we also focus on onboard passenger experience. More that moving from A to B, the APMs offer nowadays many possibilities to embark new technologies and new materials, involving the five senses pf the passengers : Audio messages, visual information, feeling of comfort and safety, speed and reliability. These are the messages we commit to convey with our products.

With the help of selected designers, we deliver the passenger experience enhancements.

POMA

ADAPTABILITY FROM DESIGN





A TRAFFIC PLANNERS' APPROVED SOLUTION

During Design Phase, we pay a special attention to the journey of each passenger according to its needs and expectations.

By optimizing :

- *accessibility*
- *waiting times (headway)*
- *comfort*
- *safety at all times*
- *speed and reliability*
- *internal and exterior design*
- *travel experience*
- *passenger flows*

Besides fulfilling the constraints of high-attendance venues such as airports, stadiums, touristic points of interests, each APM has a signature matching its environment.

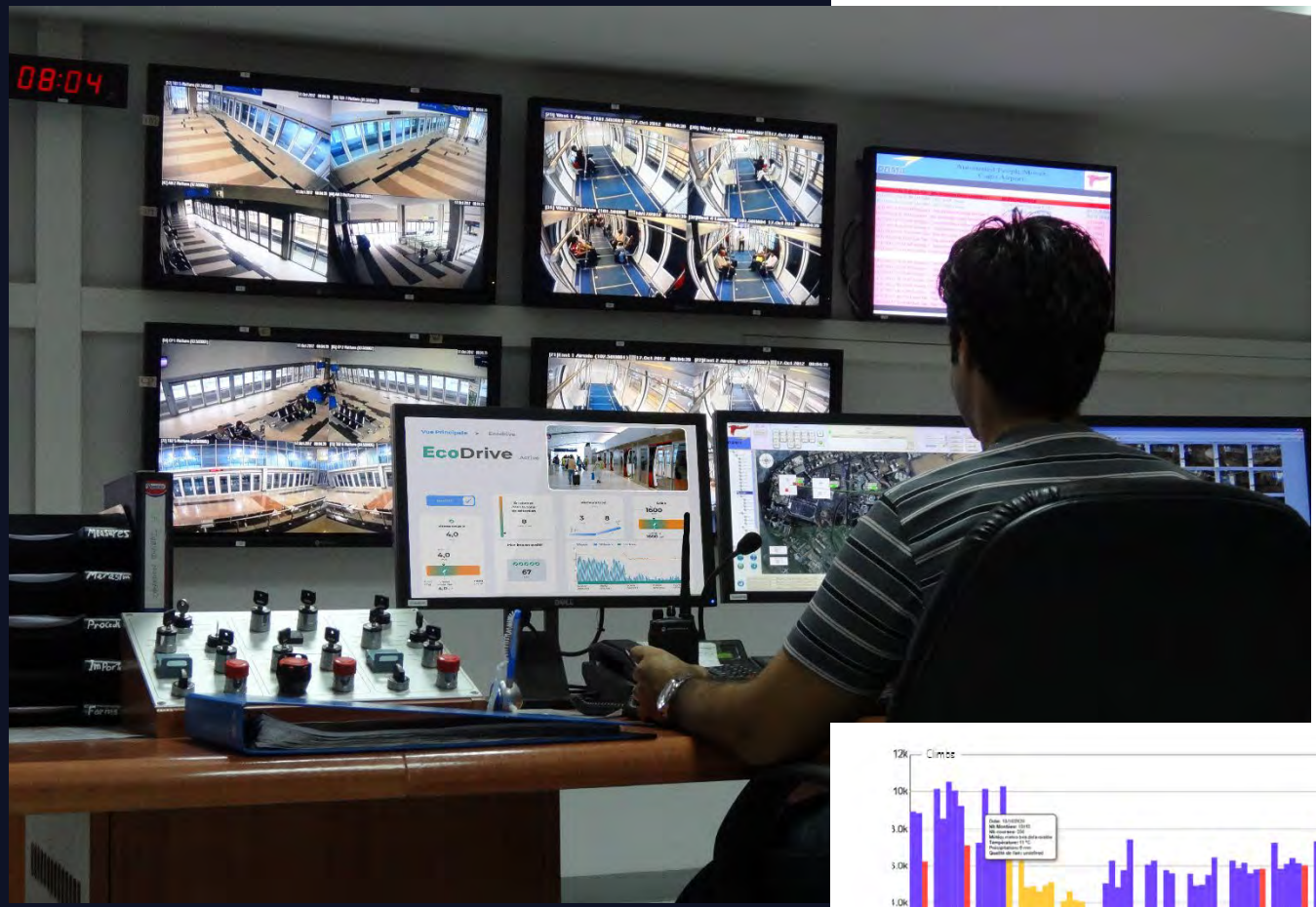

Grenoble (Research centre)


Barcelona (Subway connection to Montjuic)


Barcelona

INNOVATIVE SOLUTIONS UP TO 20% ENERGY SAVINGS

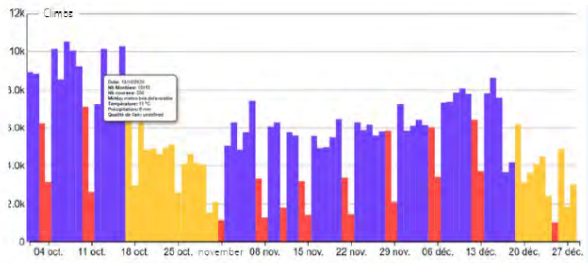
Technical innovations for the benefit of passenger, owner, and environment



ECODRIVE, since 2018

The cutting-edge technology used and implemented by POMA helps **manage the energy consumption of a ropeway**. *It has been possible for several years to install secure monitoring systems on existing or new ropeways to collect data, sometimes in real time, so as to find the best operating methods to reduce energy consumption and adapt driving.*

The **ECODRIVE** *solution developed by POMA demonstrates this gains, using passenger flow analysis amongst other parameters, as operators can choose to adapt carrier speed automatically, reducing it in off-peak times, for example. Furthermore, it helps reducing wear and tear.*



Zaha Hadid

ARCHITECTS ARE THRILLED TO COME ABOARD

Vicens & Ramos

Jean Nouvel

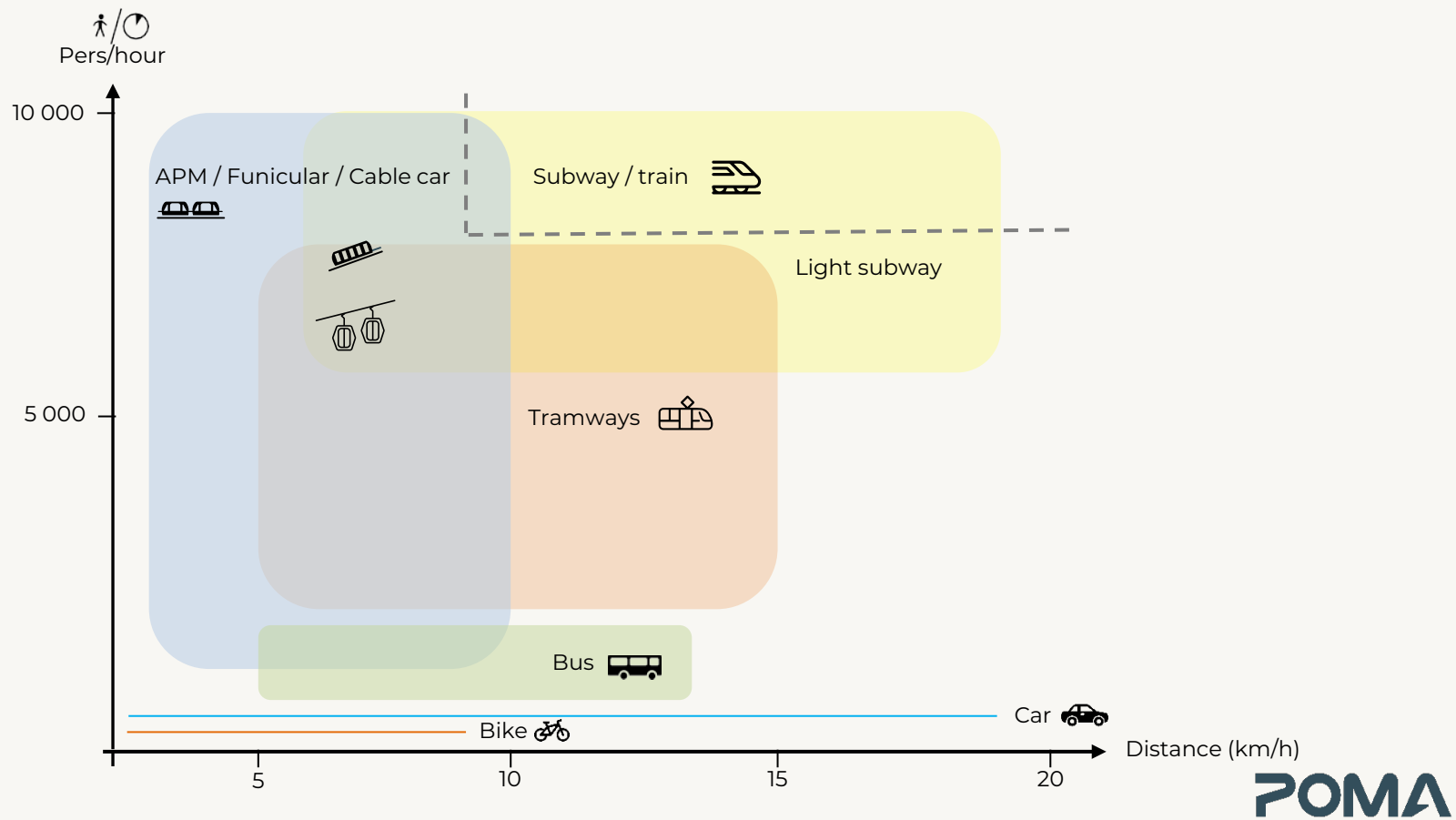
LANDMARK ARCHITECTURE FOR MODERN URBAN TRANSPORT

Jean Nouvel *connected the hilltop crested by Perugia´s old town with the bustling city below with attractive red-painted rails. Giving comfortable access to Perugia´s tourist attractions, the "Linea Rossa" quickly became a landmark in its own right.*
Zaha Hadid *created spectacular station buildings for Innsbruck´s Hungerburgbahn, which crosses the river Inn on its own bridge, connecting the city centre with the surrounding mountain peaks in one majestic sweep.*
Temporary site-specific APM installations also made architectural history in **Matteo Thun´**s *"Cloud Roof" for Hanover´s Expo-cableway and the iceblock-shaped stations created by* **Vicens + Ramos** *in Zaragoza.*

SERIAL WINNER IN SYSTEMS COMPARISON

There is no "best" urban transport system – only the best for the individual application defined by capacity needs, terrain and said urban environment.

With a capacity of up to **10,000 persons/hour**, *APM fit the gap between buses (3,500) and trams (over 10,000), while surpassing both in punctuality, reliability and availability; especially those that share their routes with other traffic participants. APM routinely act as efficient links between other mass passenger transport systems. Additionally, funiculars excel on very short routes: they easily conquer short steep inclines*



Bourg Saint Maurice

Terrain, building density, increased environmental sensitivity and growing financial pressure add up to a variety of traffic planning problems which find elegant, yet cost efficient solutions in the APM technology platform.

On routes of ***up to 8 kilometers, APM offer urban transport capacities comparable to buses and trams****, while occupying a relatively small footprint and climbing slopes which competing transport systems cannot surmount – at least not without huge additional technical complications.*

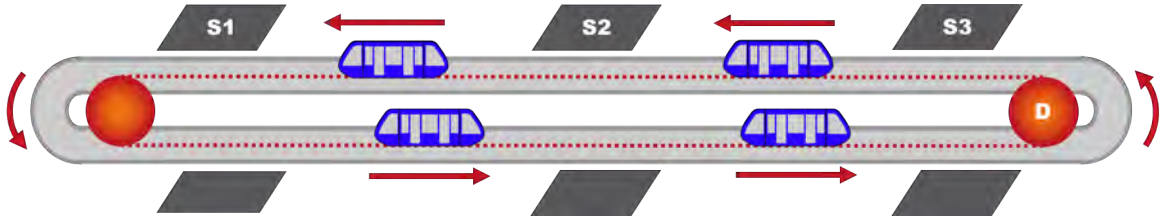
POMA

THREE OPERATION SYSTEMS

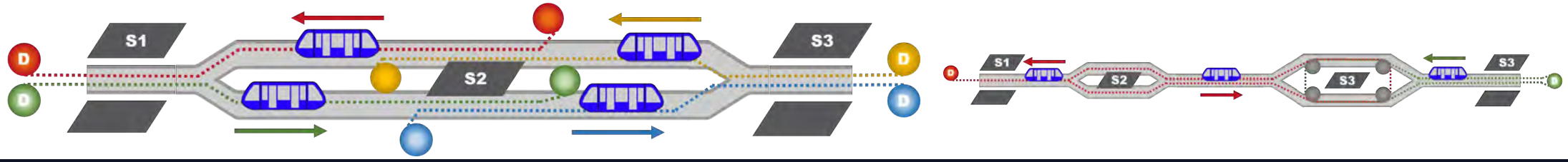
APM can be designed for either jig-back operation (shuttle), continuous mode or pinch loop mode.

In jig-back operation two trains go to and from on the same side of the track. With jig-back design, passengers enter and exit in groups.

In continuous mode the haul rope forms an endless loop, with the cabins or cars evenly spaced along the cable and rotating along the track always in the same direction. Transport capacity depends on carrier size and interval.



Pinched loop is a combination of both previous systems, which enables higher flexibility, higher capacity, and higher reliability. It consists in a smooth transition of the carrier's grip from one rope loop to the next one, in stations. The first rope loop is then free to drive another carrier.



Technical features, detachable in circular operation	
max. capacity	8,000 pers/hr/direction
min. interval	60 sec
max. incline	12%
min. curve radius	50 m
section length	up to 4 km
max. speed	22-30 km/h

Technical features, fixed grip in jig-back operation	
max. capacity	5,000 pers/hr/direction
max. incline	12%
min. curve radius	50 m
section length	up to 4 km
max. speed	36-50 km/h

Technical features, fixed grip in pinched loop operation	
max. capacity	10,000 pers/hr/direction
max. incline	12%
min. curve radius	50 m
section length	up to 8 km
max. speed	36-50 km/h

Perugia

Cairo

EXEMPLARY IN TECHNOLOGY AND APPLICATION

Oeiras

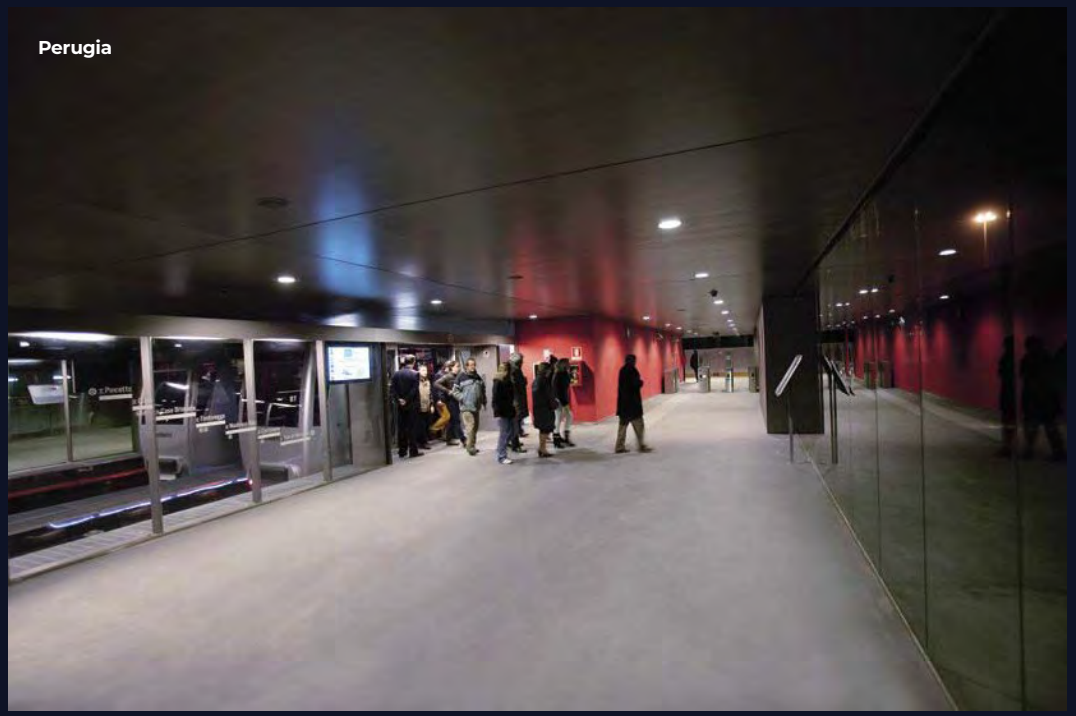
APM is a fully developed technology platform which easily adapts to the demands of a given environment and transportation requirement.

The defining characteristics are the separation of the drive system and the carrier, and the haul ropes which connect those carriers to the drives. APM are a rail-based, fully automated means of transport. As funiculars or inclined elevators they cover short routes with bends and considerable differences in altitude, rolling on steel wheels, pneumatic tires, or gliding on air cushions.

Perugia

POMA

OTHER SYSTEMS FOR PUBLIC TRANSPORT


Perugia

Frankfurt

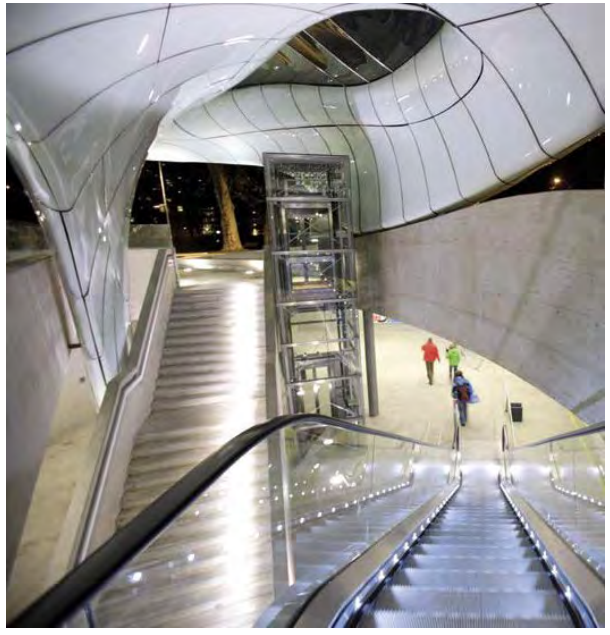
Funiculars offer very flexible routing : *straight and around bends, uphill and downhill. The size of the carriers varies, and single carriers can be connected to form trains. With speeds of up to 14 m/s, funiculars are the fastest ropeway and offer the very best reliability and availability to meet public transport demands.*
They also meet the strict technical requirements of ropeway operation.

Inclined elevators *use the basic technology of vertical elevators to cover very short, steep routes. Being fully automated, they normally operate without staff.*

A shining example of an inclined elevator is the fully automated train on Montmartre in Paris, France offering breathtaking views of the Sacré-Coeur basilica through glass roofs.

Technical Features - Funicular	
capacity	up to 10,000 pers/hr
speed	up to 15 m/s
carrier capacity	up to 400 passengers

Technical Features - Inclined elevator	
capacity	600 Pers/hr
speed	up to 4 m/s
carrier capacity	up to 100 passengers



Innsbruck

Paris (Montmartre)

REFERENCES AROUND THE WORLD

APM

Duke university Medical Center, USA
Harbour Island, Tampa, USA
Serfaus, Austria
Sun City, South Africa,
Narita International Airport, Japan,
Cincinnati International Airport, USA
J. Paul Getty Center, Los Angeles, USA
San Raffaele Hospital, Italy
Minneapolis International Airport Garage, USA
Detroit Metropolitan Airport, USA
Zurich International Aiport, Switzerland,
Minneapolis International Airport Green Concourse, USA
Huntsville Hospital, USA
Lagoas Parque Oeriras, Portugal
Perugia, Italy, O&M by POMA
Cairo Airpot, Egypt, O&M by POMA
Frankfurt, Germany
Miami International Airport, USA, O&M by POMA
Pisa, Italy, O&M by POMA

FUNICULARS

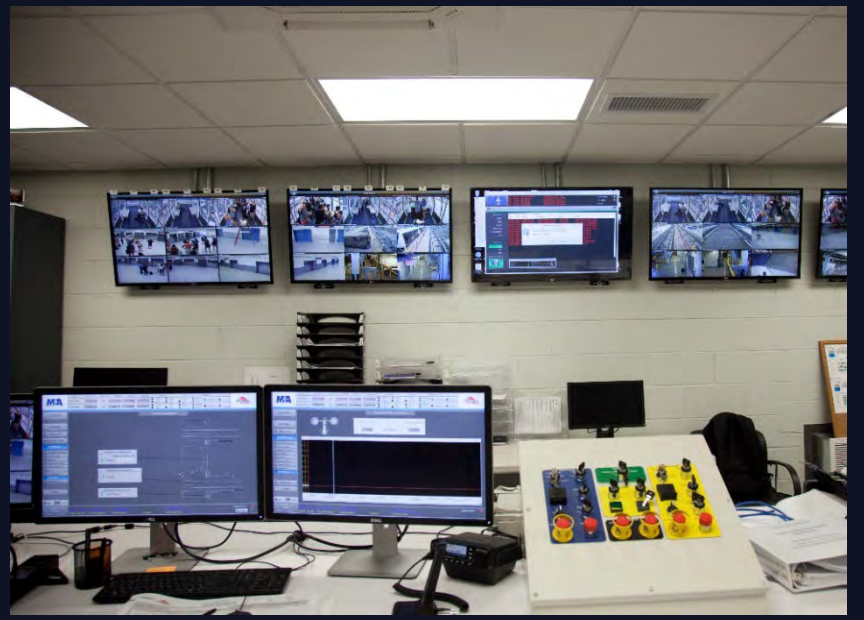
Les Arcs, France
Les 2 Alpes, France
Atomic Research Centre in Grenoble, France
Penly, France
Fourvières in Lyon, France
Tibidado in Barcelona, Spain
Enshi, China

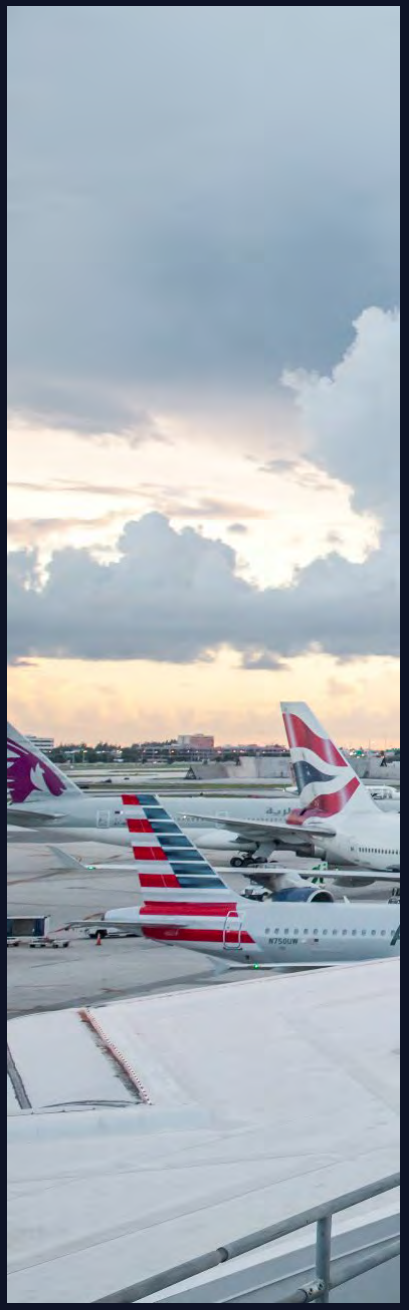
O&M : Operation & Maintenance

Miami, USA

International Airport

Miami International Airport *greets passengers eager to reach to the beaches, Everglades & Keys, or Floridan Nightlife. An APM, operated by Leitner POMA of America since 2016, links Concourse E and Satellite E with a high capacity and a high reliability solution. Miami APM, operated directly by Leitner POMA of America staff, reaches sustainably very high levels of reliability and low downtime. It is based on a 2 large shuttles on a relatively small distance, running at 11meters per second, with less than 2 minutes headway. This combination enables to reach high frequency and high capacity of transport within the busy airport. The solution selected in Miami are carriers on wheels, a fail-proof technology regarding horizontal transportation on a viaduct.*





52 millions passengers/year

- ***The task***
  Internal Airport Service
- ***APM***
  Rubber Tyres on Steel Beams
- ***The Capacity***
  5,600 passengers/hour/direction
- **Year commissioned**
  2017

POMA

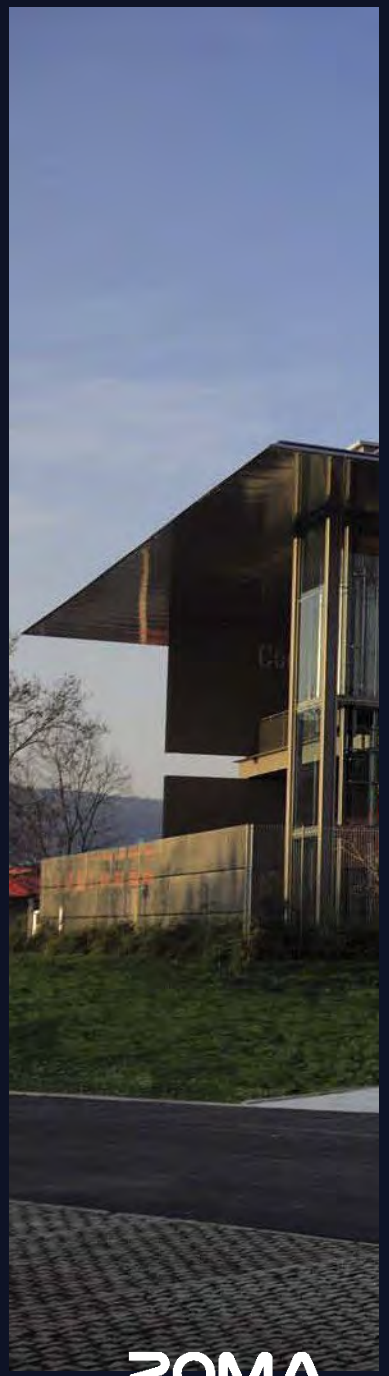
Perugia, Italy

The "Linea rossa"

Perugia *is an Italian regional capital with over 3,000 years of history and a charming, bustling old town on top of a steep hill, accessible only by extremely narrow, winding roads.*

Setting a goal of minimizing car traffic, the city installed an intelligent combination of escalators and elevators, offering quick and barrier-free access to Perugia´s old town. These successful moves towards soft mobility were crowned by the installation of an APM in 2008. This funicular with up to 25 cars, each for up to 50 passengers, runs from a large park&ride at Pian di Massiano in Perugia´s outskirts through a recently developed residential area to the railway station. From there through a tunnel up the hill into the old town, connecting five stations on a three kilometers track in 60 second-intervals: For passengers of the "Linea Rossa", train schedules and boring waits are a thing of the past.

The nickname "Red Line" refers to famous architect Jean Nouvel´s design approach: By integrating highly functional station design and flashy red- painted tracks he designed a new, elegant and innovative accent which fits perfectly into Perugia´s cityscape.



- **The city**
  Perugia – 160,000 inhabitants
- **The task**
  access to the historic old town
- **The APM**
  detachable funicular on pneumatic tires
- **The cars**
  25 with 50 passengers each
- **The track**
  length 3,015 m
  elevation 161 m
- **The capacity**
  3,000 passengers/hour/direction
- **The success**
  3 million passengers/year
- **The average availability since commissioning**
  99.9%

POMA

Frankfurt, Germany

The Square Metro

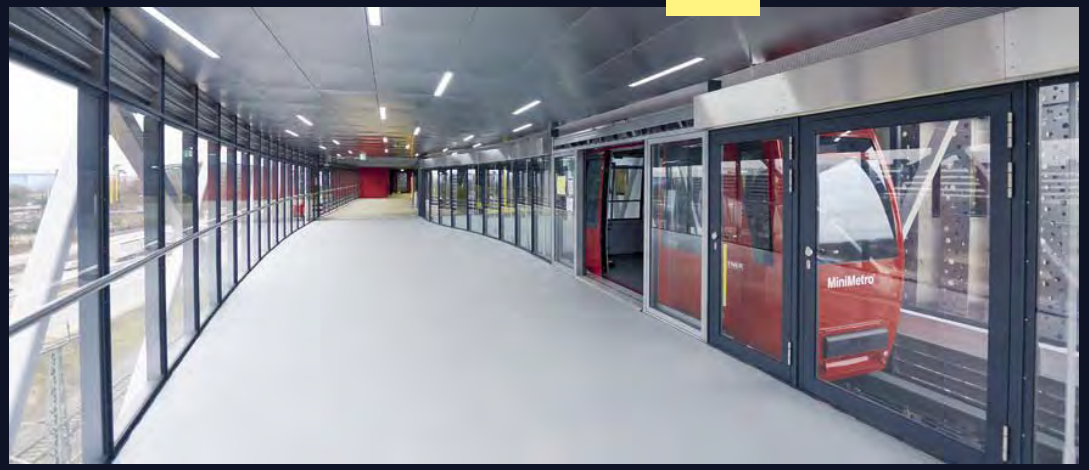
(Airport)

Frankfurt Airport *is the continental Europe´s busiest passenger hub and a vital infrastructure of a globally connected financial metropolis. This is the site of The Squaire, an avantgardistic "New Work City" of almost half a mile long and 140,000 square meters of usable space. In short: one of the world´s largest office buildings.*

Searching for a reliable, fast and efficient link between the Squaire and its 2,500 car parkade, the developers chose an APM solution for unsurpassed comfort, maximum reliability, environmental-friendliness and minimal operating costs. The Squaire Metro operates fully- automatic 24/7, covering the 300 meter distance between office building and parkade, including the crossing of a motorway, another main road and a railway line in a short 80 seconds. All the

while providing passengers a spectacular view from 18 meters above ground: The Squaire Metro

runs in a 5 by 5 meters framework, supported by eight steel columns: the so-called Skylink.



POMA

The Frankfurt airport
60 million passengers/year

The task
connecting a mega-office its parkade

The APM
fixed grip funicular on pneumatic tires

The track
300 m

The interval
two minutes

The capacity
1,500 passengers/hour/direction

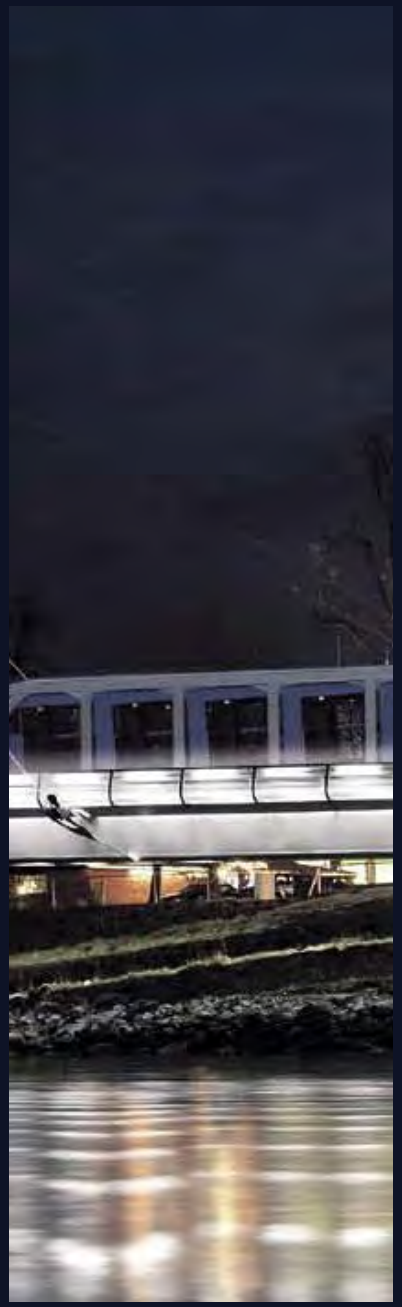
POMA

Innsbruck, Austria

The Hungerburgbahn

***Innsbruck´s** new Hungerburgbahn, commissioned in 2007, replaced a 100 year old ropeway connection, opening new dimensions for municipal public transport. The new APM begins in the town centre, via two stations up to the Hungerburg quarter with its tourist attractions including « Alpenzoo », there connecting with skytrams to the alpine mountain landscapes surrounding Innsbruck. The result is a high-capacity connection from the city center at 560 m via Hungerburg (886 m) and Seegrube (1,905 m) to the Hafelekar at 2,330 m above sea level.*

The new Hungerburgbahn was built by a public-private partnership. It is an integrated part of Innsbruck´s public transport system and it´s tariff regulation, with the operation schedule coordinated with the requirements of the city´s inhabitants. The Hungerburgbahn proudly ranks among Time Magazine´s « Design 100 ». With the soft-flowing lines of Hungerburgbahn´s station buildings, famous architect Zaha Hadid, also creator of Innsbruck´s new Berg Isel ski jump, has added a futuristic accent to the cityscape.



POMA

- **The city**
  Innsbruck – 120,000 inhabitants
- **The task**
  Connect the inner city with an alpine recreational area
- **The APM**
  Fixed grip funicular on rails
- **The track**
  1,800 m - elevation 288 m
- **The capacity**
  1,200 passengers/hour/direction
- **The success**
  40,000 passengers/month

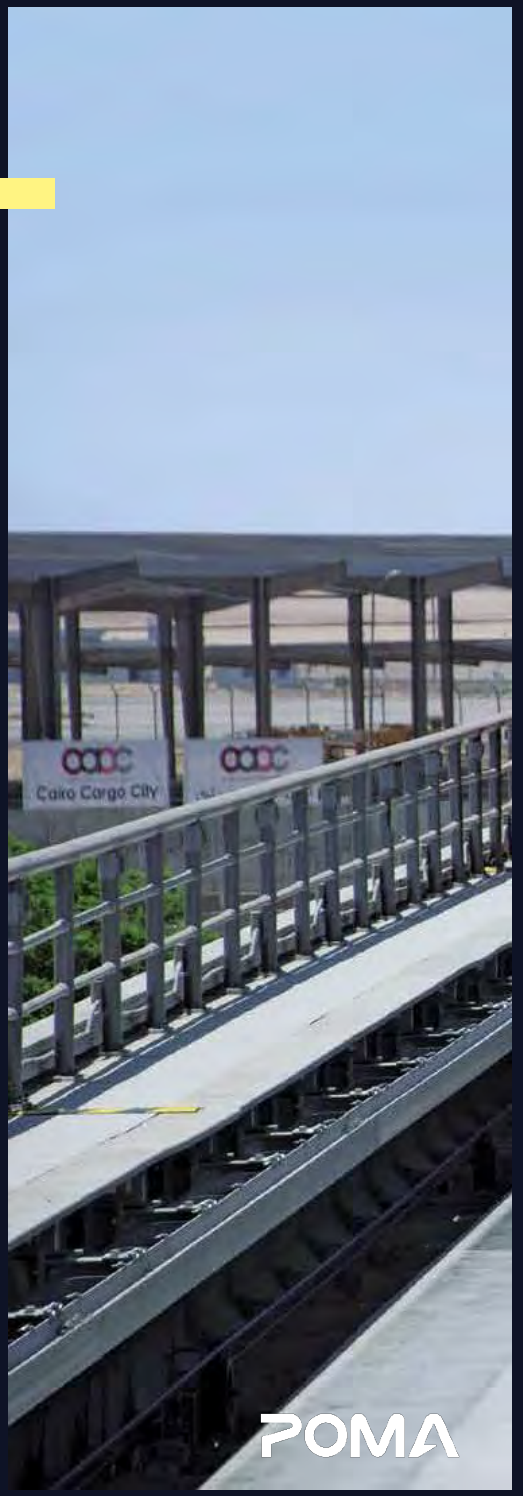
POMA

Cairo, Egypt

The Terminal-Shuttle

Booming **Cairo International Airport**, *already one of the Middle East´s busiest airports, was looking for an efficient transport solution to connect its three terminals. Continuously growing passenger numbers made speed, availability, reliability and longevity the most important criteria for the selection.*

The system of choice was an innovative air cushion-based APM solution: offering high speed, noiseless comfort, a record low in emissions with futuristic design. Thus creating a convincing, future-proof solution for a rapidly growing airport



The Cairo airport
22 million passengers/year

The task
Connect airport terminals T1 and T2/T3, a shopping center and parkades

The APM
Jig-back funicular on air evitation

The track
1,857 m

The interval
Every 5 minutes at a speed of 13.5 m/s (50 km/h)

The capacity
2,000 passengers/hour/direction

Carriers
2 with 170 passengers each

POMA

Zurich, Switzerland

The Skymetro

Zurich *is a financial hub, a tourist destination, a city of culture - and a life quality world champion. Since 2003, the city is also a APM location: At Zurich Airport, the Skymetro links the Airside Center with dock E. Hovering on a 1.5-millimeter air cushion, the Skymetro runs through two parallel tunnels, making this connection in just two short minutes. Both trains have two cars with a capacity of 112 passengers each, with an optional third car in reserve to cover peak demand. In 2006, 160 lightboxes were installed in the tunnels, with flipbook-like pictures forming a short movie clip to entertain the passengers of the passing trains*

POMA

The task
Internal airport shuttle service

The APM
Fixed grip funicular on air levitation

The track
1,138 m - elevation 0 m

The Capacity
4,480 passengers/hour/direction

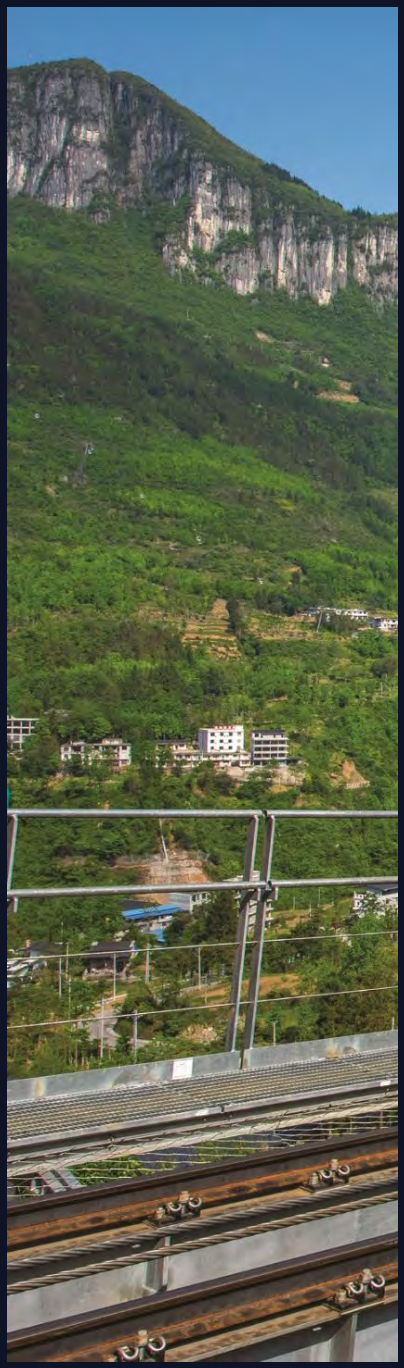
Year commissioned
2003

Enshi, China

Grand Canyon

The **Enshi Grand Canyon** *in Hubei province is one of the most remarkable tourist parks in China.*

Local client, in charge of the development of tourism at the site, requested POMA to add a funicular railway, leading visitors from the Tourism Centre, with its hotels, restaurants, car parks and ticket office, to a natural area and a POMA gondola lift. This is a soft and sustainable mobility solution that can do the work of a fleet of buses and so help to protect the environment of this exceptional site. It is fitted with the POMA variable frequency drive and DirectDrive® subsystem, which is a first in the entire Asia region.
The funicular railway serves smoothly the bottom station of the gondola lift. This gives tourists soft, quick and easy access to the various hiking trails that are very close to the gondola lift departure and arrival stations, as well as the essential spots like the "incense pillar" and the "castle", unique 500 m high limestone rock formations



The task
Touristic - Distant Access to Enshi Grand Canyon Natural area

APM
Guided Funicular on steel wheels, steeel rails

The Capacity
4,200 passengers/hour/direction

Year commissioned
2022

POMA

Barcelona, Spain

The Tibidabo « Cuca de Llum »

The **Cuca de Llum** *has an advanced and innovative design that frees up space inside and increases its capacity to 252 passengers per trip. The new vehicle is faster - the journey time is reduced to 4 minutes - and offers a better experience and entertainment to the users. The new design also allows you to enjoy a panoramic view of the entire journey through the large windows and offer new educational content through screens and electronic tablets located inside the vehicles. The interior of the funicular is freed up, enabling a greater surface available and becoming a diaphanous space that offers greater visual permeability inside.*

The interior lighting has also been improved, and more emphasis is given to the exterior lighting, which follows a more modern and futuristic line, and which enhances its effect when it gets dark.Through its large windows, visitors can enjoy the landscape and discover the natural environment of the Serra de Collserola and the animal and plant species that inhabit it.

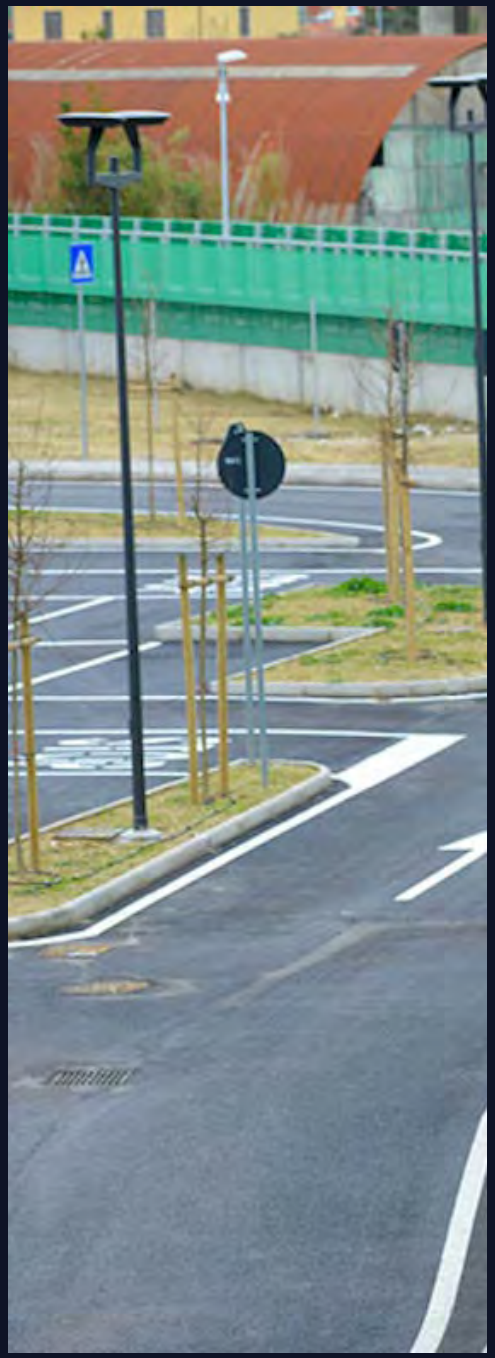
POMA

- **The task**
  Touristic Access to up-the-hill Tibidabo Park with Amusement park and view
- **APM**
  Guided Funicular on steel wheels, steel rails
- **The Capacity**
  250 persons per cabin
- **Year commissioned**
  2022

Pisa, Italy

People Mover

Pisa *People Mover is one of the POMA and Leitner flagship for Operation and Maintenance, with very high Performance and Customer Satisfaction ratings.*
POMA and Leitner were initially chosen in Pisa to handle the operation and maintenance of the constructed APM on this urban and touristic site.
POMA and Leitner created an integrated mobility solution, in response to a specific need. It provides 360° support remote support, technical operation, commercial operation, maintenance, joint operation and maintenance, continuous improvement, etc.
Pisa is a vivid evidence that POMA and Leitner commit to a solution from start to end, on the long term, ensuring high performance at all times.



POMA

- **The task**
  Urban Multimodal connection for Pisa town Train/Bus/Airport/Carparks

- **APM**
  Guided APM on rubber tyres wheels, steel rails

- **The Capacity**
  1150 persons per hour per direction

- **Year commissioned**
  2016

Serfaus, Austria

U-Bahn

In **Serfaus**, *Austria, POMA deployed innovative construction method statements to proceed to a full-scale renovation.*

The deployment of such methods enabled a staged renovation, with limited impact on usual traffic. The works extended over a period of 3 years but the funicular remained operating for 3 consecutive high-attendance seasons.
Customer was very pleased to apply such methods and sustain its activity, keep its visitors able to use the transport service, while refreshing its asset.
Serfaus APM also demonstrates the ability to work in tunnels, such as a metro.

- **The task**
  Urban Underground Multimodal service for access to all points of interests of Serfaus Village
- **APM**
  Guided APM on Air Levitation
- **The Capacity**
  3000 persons per hour per direction
- **Year commissioned**
  2019

POMA

POMA, A GLOBAL APPROACH

To attend customer's expectations, POMA is able to deliver Projects Turnkey or Supply-only, **from Design to final testing and commissioning**.

POMA Engineers and Project Teams have demonstrated a tight policy to adhere to Project Execution Plan, Right-First-Time. Airports such as Miami International Airport are specially constrained area and require all attention from POMA to deliver. After Delivery, Transition to Operation and Maintenance happens in a step approach, with performance demonstration, logistic mobilization,

Succesful experience of Pisa, **know-how transfer and hands-on trainings**. *Cairo demonstrate that* **POMA never lets a client down in achieveing performance**.

Design and Configuration
Proven components
Eco-design

Design and Realization
12 to 18 months
Scalability Reversibility

Skills Management
Simulator driving
Simulator Training

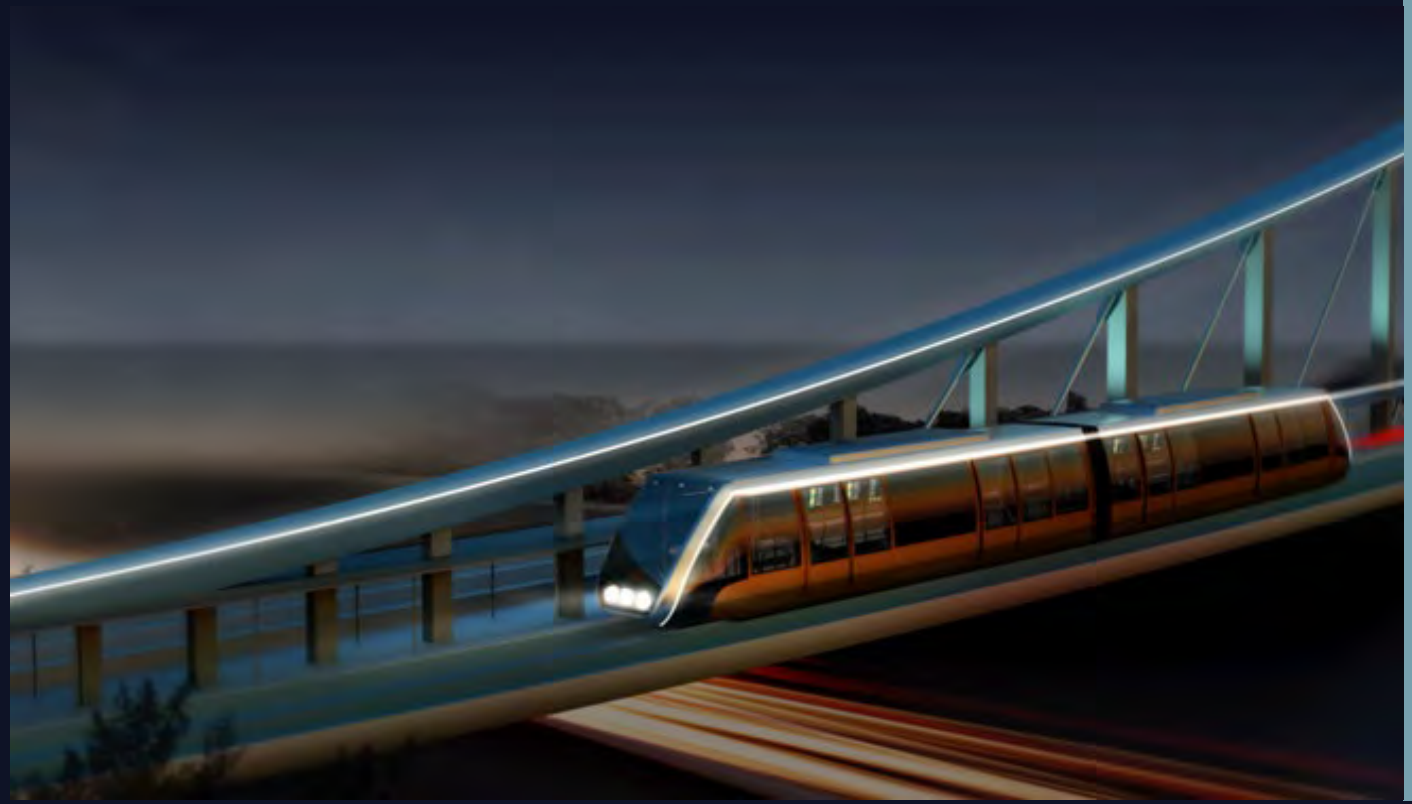
Operation and Maintenance
Methodology and Tools
Long term Maintenance

POMA

A PIONEERING SPIRIT

POMA is a leader in cable transportation technology. Ever since it was founded, POMA has been the partner for **innovative and sustainable** *designs, paving the way in cable transportation as a mobility solution, from cities to mountains* **that people will love to use**.

POMA engaged



88
years of innovation

75 %
of sales revenue from exports

8 000
installations worldwide

90
reference countries

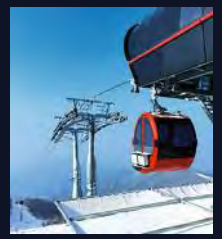
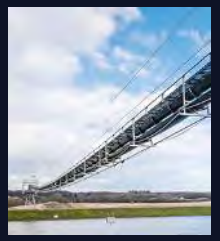
4 300
employees throughout the world

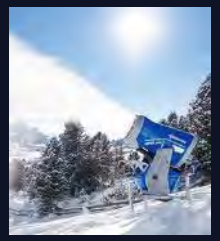
POMA

HTI

LEITNER POMA BARTHOLET agudio Pinoth DEMACLENKO skadii TROYER LEITWIND






4 300
Employees

35,8 M€
Investments in R&D

1 400 M€
2023 turnover

POMA

www.poma.net

POMA